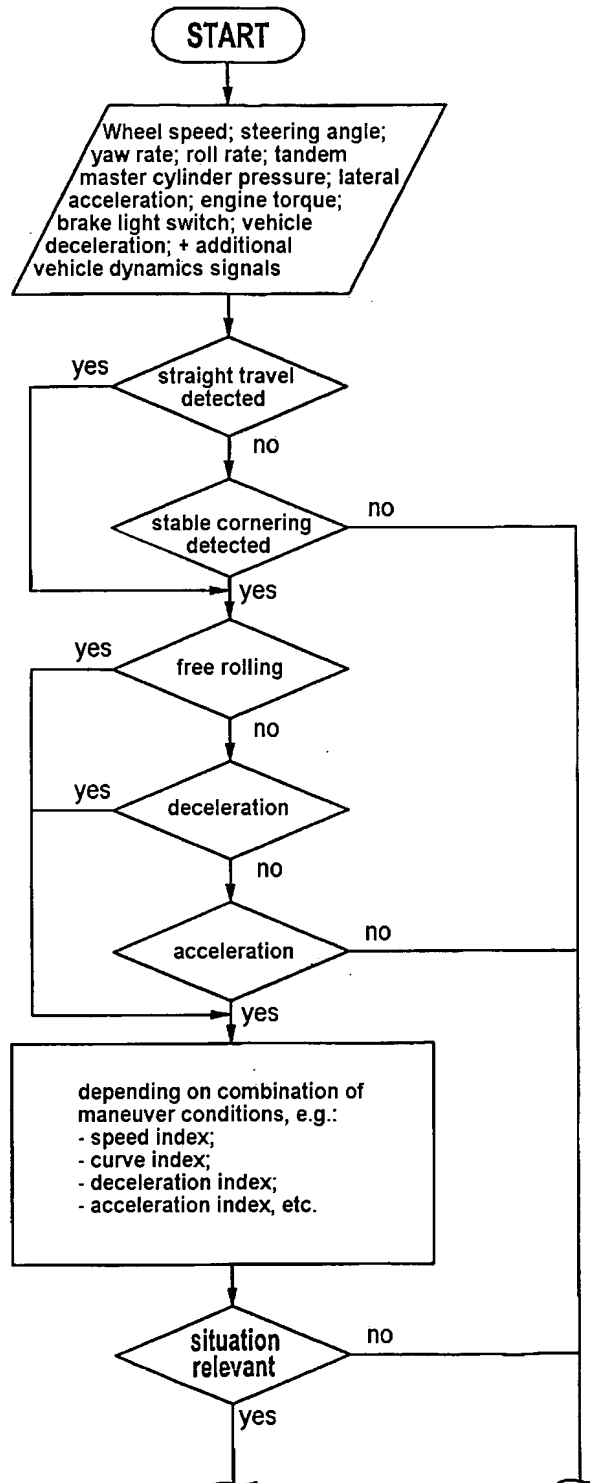


1/3

**1. Signal configuration****2. Situation evaluation****2.1. Detect driving maneuvers****2.2. Evaluate driving condition configuration by way of corresponding index****2.3. Decision****Fig. 1A**

### 3. Feature evaluation

#### 3.1. Detection

#### 3.2. Configuration

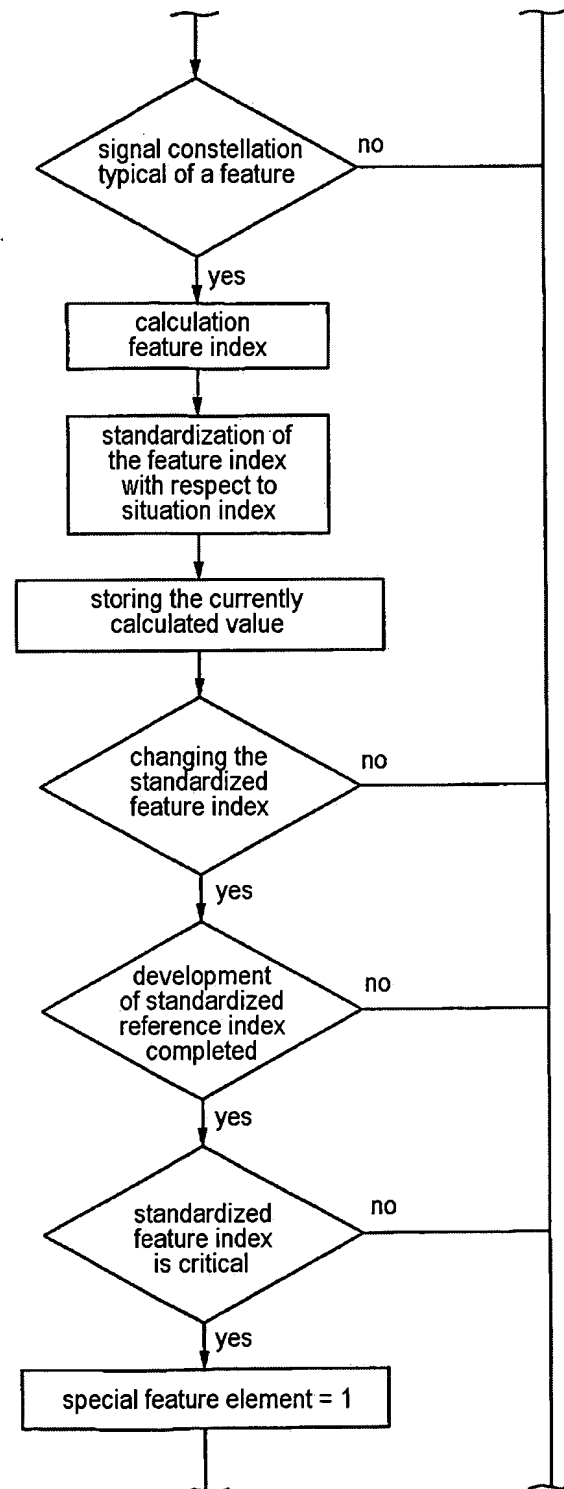
#### 3.3. Standardization

#### 3.4. Statistical adaptation according to relevant situation

#### 3.5. Taking into account the learning phase

#### 3.6. Evaluation

#### 3.7. Validation



**Fig. 1B**

#### 4. Suspicion development

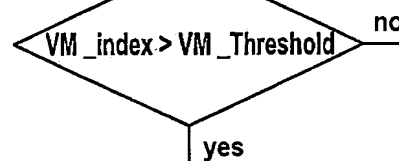
4.1. Matrix with accumulated weighted feature elements of correlating features from different driving situations

$A_{11} = \sum \text{feature element A1} * k_1$ (situation A/ feature 1)	$A_{m1} = \sum \text{feature element B2} * k_2$ (situation B/ feature 2)
$A_{1n} = \sum \text{feature element C5} * k_3$ (situation C/ feature 5)	$A_{mn} = \sum \text{feature element XY} * k_i$ (situation X/ feature Y)

4.2. Mean value of the suspicion matrix as suspicious factor index

$$VM\_index = \frac{\sum_{j=1}^m \sum_{i=1}^n A_{ji}}{m * n}$$

4.3. Development of a suspicious factor (e.g. suspicious factor index > threshold value)



4.4. Formulate, store, and/or indicate suspicion

suspicion\_XY = 1  
(e.g. right front wheel suspension is defective)

4.5. Influencing the calculation of the maintenance interval

correction maintenance interval

END

Fig. 1C